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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,740	04/09/2004	David Mills	DKT 03050A (BW1-00086)	1865
68945 7590 03/29/2007 WARN, HOFFMANN, MILLER & OZGA, P.C. P.O. BOX 70098 ROCHESTER HILLS, MI 48307			EXAMINER FRISTOE JR, JOHN K	
			ART UNIT	PAPER NUMBER
			3753	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/29/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/821,740

Applicant(s)

MILLS ET AL.

Examiner

John K. Fristoe Jr.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 1/30/2007 have been fully considered but they are not persuasive. Applicants argue that Zapf in view of Giordana does not disclose a fluid housing, the examiner disagrees. Zapf discloses that element 2 is connected to an assembly which could be considered a fluid housing. Applicants then argue that the valve member of Zapf is not within the valve-receiving chamber (with element 64), the examiner disagrees. The valve member 6 is received within element 64 in figure 2. Applicants also argue that the modified valve assembly of Zapf in view of Giordana not teach a valve assembly having a plastic seat member press fit within the valve assembly, the examiner disagrees. The examiner agrees with Applicant's assertion that Zapf does not disclose a plastic valve seat that is press fit within the assembly, however Zapf does disclose a metal valve seat press fit within the valve assembly and Giordana teaches making the set from plastic. Therefore one of ordinary skill in the art of valve design could modify the metal valve seat of Zapf by making the seat of plastic as taught by Giordana. Since the following prior art rejections are being maintained the instant Office action has been made final.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 9-13, 15-19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,336,470 (Zapf) in view of U.S. Pat. No. 3,856,260 (Giordana). Zapf discloses a solenoid fluid control valve comprising a fluid control body (2), a central cavity (4), a pressure supply passage (P), a radially pressure control passage (A), a feed supply tube (64), at least one flying buttress (56), a valve seat (54), a wing member (54b), a ball valve (6), a valve receiving chamber (within element 64), a solenoid (16) for opening the valve (6) in response to a signal (col. 3, lines 63-67), a coil (24) having radially stepped inner diameters, a bobbin (32a, 32b), a casing member (20), a flux tube (portion of element 20 adjacent element 28 in figure 1) having a support portion, a C-shaped integrally molded retention ring (portion of element 22 surrounding element 28, that portion of the element does not completely surround element 28 in figure 1 and therefore is C-shaped), an armature (14), a pressure relief vent (46), a pole piece (40), and a control rod (12) but lacks the valve seat made of plastic. Giordana teaches a solenoid valve comprising a solenoid (3), a ball member (5), and a plastic valve seat (col. 3, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the solenoid fluid control valve of Zapf by using a plastic seat member as taught by Giordana in order to improve the sealing at the valve seat and to reduce the weight of the total weight of valve assembly.

Regarding the "press fit" recited in claims 1, 10, and 16, the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product in the prior art, the claim is unpatentable even though the prior product was made by a different process (see MPEP 2113).

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4. Claims 8, 14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,336,470 (Zapf) in view of U.S. Pat. No. 3,856,260 (Giordana) as applied to claims 6, 10, and 16 above, and further in view of engineering expedient. Zapf discloses a solenoid fluid control valve comprising a fluid control body (2), a central cavity (4), a pressure supply passage (P), a radially pressure control passage (A), a feed supply tube (64), at least one flying buttress (56), a valve seat (54), a wing member (54b), a ball valve (6), a valve receiving chamber (within element 64), a solenoid (16) for opening the valve (6) in response to a signal (col. 3, lines 63-67), a coil (24) having radially stepped inner diameters, a bobbin (32a, 32b), a casing member (20), a flux tube (portion of element 20 adjacent element 28 in figure 1) having a support portion, a C-shaped integrally molded retention ring (portion of element 22 surrounding element 28, that portion of the element does not completely surround element 28 in figure 1 and therefore is C-shaped), an armature (14), a pressure relief vent (46), a pole piece (40), a control rod (12), and a plastic valve seat but lacks the upper surfaces of at least one wing member adjacent the pole piece is maintained within a tolerance of ± 0.025 mm. One of ordinary skill in the art of valve design would manufacture a buttress member having an acceptable size tolerance, such as ± 0.025 mm, so that the valve pieces when assembled will fit together. It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the solenoid fluid control valve of Zapf by maintaining a tolerance of ± 0.025 of the upper surfaces of the flying buttress member as an engineering expedient in order for the flying buttress to fit within the valve bore during assembly.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

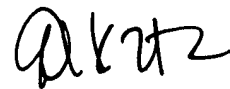
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John K. Fristoe Jr. whose telephone number is (571) 272-4926. The examiner can normally be reached on Monday-Friday, 7: 00 a.m-4: 30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric S. Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

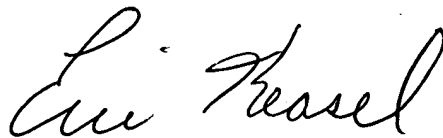
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John K. Fristoe Jr.
Examiner
Art Unit 3753

JKF



ERIC KEASEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700